

ABSTRACT OF THE DISCLOSURE

A system and apparatus for dropping and adding optical data streams in an optical communication network uses a photonic switching fabric for dropping but not adding optical data streams, and uses a combiner external to this photonic switching fabric for combining passed optical data streams from the photonic switching fabric together with added optical data streams. The added optical data streams are not limited to the wavelengths of the dropped optical data streams. The photonic switching fabric may be a Micro Electro Mechanical System (MEMS) that uses single-sided mirrors configurable to drop but not add optical data streams.